EXHIBIT C

INTELLECTUAL CAPITAL EQUITY

OCEAN TOMO

INTELLECTUAL CAPITAL EQUITY

ORACLE AMERICA, INC.

V.

GOOGLE INC.

CASE NO. CV 10-03561 WHA

RESPONSIVE EXPERT REPORT OF JAMES E. MALACKOWSKI

[CORRECTED]

February 29, 2016

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1. **FIRM BACKGROUND AND QUALIFICATIONS**

    1. My background and qualifications are set forth in my prior report dated January 8, 2016.

2. **ASSIGNMENT**

    2. Ocean Tomo was retained by Orrick, Herrington & Sutcliffe LLP ("Orrick") counsel for plaintiff, Oracle America, Inc. ("Oracle" or "Plaintiff"), in connection with this matter in July of 2015. Ocean Tomo has been asked to evaluate the amount of monetary recovery due to Oracle for Google Inc.'s ("Google" or "Defendant") infringement of copyrights in the Java platform ("Infringed Java Copyrights") in connection with Google's Android platform for use in mobile phones and other devices.

    3. In connection with my assignment in this matter, I issued an expert report on January 8, 2016 which provided my opinions regarding the amount and type of losses suffered by Oracle, as well as the non-apportioned revenues and profits generated by Google that, in my opinion, meet the causal nexus test ("Initial Report").

    4. As explicitly stated in my Initial Report, as of the date of that report, I had not addressed the issue of apportioning Google's profits which meet the causal nexus test between infringing and non-infringing attributes of the Android Platform, referred to generally as Google's causally connected profits. Rather, I expected to offer such opinions in a later report, as set out by the three-part damages report schedule in this case.

    5. This is that "later report" and therefore it reflects my opinions regarding the apportionment of Google's causally connected profits. In addition to addressing the apportionment of Google's causally connected profits, this report also provides responses to several opinions put forth in the report submitted by Google's damages expert (Dr. Gregory Leonard) on February 8, 2016 ("Leonard Report").

    6. A detailed listing of the documents reviewed by Ocean Tomo since the issuance of my Initial Report is included in the footnotes to this report and/or the summary provided in **Exhibit 2.** References to documents and testimony herein are meant to provide examples of supporting information, but are not intended to be a comprehensive or exhaustive listing of all known support or to signify a heightened level of importance. In addition to this report, I may rely on video excerpts taken from videotaped depositions and/or demonstrative exhibits that illustrate the concepts and conclusions contained in this report. Such excerpts and/or demonstratives have not yet been prepared.

    7. The opinions discussed throughout this report are based on my current understanding of the facts and circumstances surrounding this matter, my review of the produced documentation, testimony, third party and public information available to date, the legal framework for copyright remedies, and any underlying assumptions upon which I have relied. As such, the analyses and opinions described herein are subject to change based upon additional discovery or any other relevant development.

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Android handset sales could have been utilized by Apple."[44] This is untrue as Apple has experienced numerous supply shortages when releasing its iPhone products.[45] In fact, it has suffered from supply shortages almost every time it has released an iPhone. Yet, Dr. Leonard's analysis simply assumes away that real world fact.

58.   This assumption also ignores other players in the market with access to those same resources. While Android sales may have dropped, Dr. Leonard's model ignores that another entity with their own OS may have required the same resources in a "but for" Android world. Additionally, it suggests Apple's closed environment would have monopolized the smartphone market which ignores the success that resulted from Android's free open source model. Android was able to compete with Apple and, "but-for" Android, other parties could have competed as well.[46] There were already numerous other participants in the market, including Microsoft and Nokia with their own platforms, and numerous players selling Java-based devices. Indeed, without more detailed information related to Apple's supply chain, it is unreasonable even to assume that Apple would have had the capacity to make all of the additional Android related sales.

59.   Absent Android, which secured a number of critical relationships to gain its success, parties would have formed different relationships and continued to compete in the mobile handset market. Evidence indicates that a number of players in the market including Microsoft and Nokia, were making investments.[47] Carriers were pressuring OEMs to provide alternatives to iPhone since it was exclusively offered by AT&T.[48] Most of those OEMs and carriers (which changed over time as AT&T was no longer exclusive to iPhone) partnered with Android,[49] but to expect OEMs to do nothing to successfully compete with iPhone in the counterfactual world is inappropriate. Android's success ceased much of the activity by competitors and became a barrier to entry. Guessing what would have occurred without its rapidly successful presence in the market requires too many assumptions for a reasonable damages opinion.[50]

60.   Assuming Android would have existed without Google's infringement is also speculative. It would have taken Google longer to get to market had it not used the Infringed Java Copyrights.[51] Given the unique window of opportunity in the mobile space at the time, a delay would have altered the market dynamics.

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[44] Footnote 286 to the Expert Report of Dr. Leonard, February 8, 2016, p. 93.

[45] http://www.pcmag.com/article2/0,2817,2366762,00.asp, http://www.cnet.com/news/iphone-6s-plus-in-short-supply-due-to-production-issues-says-analyst/#!; http://www.zdnet.com/article/iphone-5s-reportedly-in-short-supply-for-fridays-launch/.

[46] Expert Report of Professor Adam Jaffe, February 29, 2016, ¶¶20-41.

[47] OAGOOGLE0002778854-882 at 855 and 869.

[48] OAGOOGLE0000799926; http://www.pcmag.com/article2/0,2817,2366762,00.asp.

[49] OAGOOGLE0000799926; OAGOOGLE0000457616-617 at 617.

[50] I note that these issues are further discussed in the section of my report which responds to Dr. Leonard's comments concerning my lost profit opinions.

[51] Expert Report of Professor Adam Jaffe, February 8, 2016, ¶¶196 and 199.

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According to Dr. Kemerer, "[t]hese PageRank results show the importance of the 37 copied Java API packages to the network of the Android operating system."[125]

126.   The relative importance of the Infringed Java Copyrights to the network of the Android operating system indicates that the Infringed Java Copyrights are more valuable than the value indicated by an apportionment approach based on a percentage-of-lines-of-source-code ratio, such as the approach adopted by Dr. Leonard.

4.6.5   The 37 Java APIs Enabled Google to Get Android to Market More Quickly

127.   According to Dr. Kemerer, when Android was first created, Google benefited by leveraging the popularity and familiarity of the Java platform (including the Infringed Java Copyrights) among developers in order to quickly attract them to the Android platform.[126] I understand that developers are generally most familiar with declaring codes and SSO elements, and less familiar with the underlying implementing code.[127] Google's use of the 37 Java APIs thus hastened the attraction of millions of developers' familiarity with the Android platform and assisted in Google's success in reaching and building a significant core of application developers.

128.   Developers' familiarity with the Java platform, including the 37 APIs, not only attracted developers to the Android platform, but also enhanced the developers' productivity.[128] APIs allow for the faster, more efficient construction of high quality applications. Rather than engaging in the more laborious task of writing sequences of program code from scratch, developers were able to draw on the resources of the Java APIs, and use the packaged classes and methods to more easily create high quality programs.[129]

129.   By using the familiar Java APIs, Google both attracted more developers to the Android platform and made the work of those developers easier, thus further accelerating the development and acceptance of the Android platform.[130] Google needed to develop a mobile platform quickly to establish its presence in the market and to start the process of monetizing data from user engagement with applications and devices.[131]

130.   Google was motivated to get to this market quickly before competing mobile platforms gained significant market share at Google's expense, and before it lost the opportunity to dominate the

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[125] Expert Report of Dr. Kemerer, January 8, 2016, ¶ 153.
[126] Expert Report of Dr. Kemerer, January 8, 2016, ¶ 64.
[127] Expert Report of Dr. Kemerer, January 8, 2016, ¶ 76.
[128] Expert Report of Dr. Schmidt, January 8, 2016, ¶ 75.
[129] Expert Report of Dr. Kemerer, January 8, 2016, ¶ 22.
[130] Expert Report of Dr. Kemerer, January 8, 2016, ¶ 94.
[131] Expert Report of Dr. Kemerer, January 8, 2016, ¶ 66.

they're also paying companies above and beyond development costs for the privilege" adding, however, that "such a strategy is not self-sustaining in the long term."[181] In the same email chain, Mr. Meier compared incentivizing third party developers to "throw[ing] some money out the window and see if it comes to something."[182]

4.7.3.2 Dr. Leonard Underestimates the Full Costs of Developing a Mobile App

166.   In his testimony, Mr. Meier stated that such a program wasn't compelling to developers and ineffective because it "may have offsetted [sic] the initial upfront development costs, but the long-term, ongoing development maintenance and – support of a product would continue to cost additional resources for the company….there's significant risk that they wouldn't continue to develop, evolve, and ensure that it continued to be a high-quality app would have, in the longer term been a negative for the platform, and, additionally, the offset, in terms of ROI to developers, just wasn't that compelling…If we are talking about big brands, these aren't huge amounts of money, and their interest, from my recollection, was more of a longer-term ROI rather than an initial requirement to be able to offset the initial development." [183]

167.   Dr. Leonard ignores the long term costs required to develop and maintain a mobile app and instead basis his calculation only on estimated up front development costs of $25,000 - $100,000. Industry experts have indicated that up front development costs are only the "the tip of the iceberg".[184] A November 2014 Kinvey Report based on a survey of CIOs and Mobile Leaders found that mobile app development can be "costly, slow and frustrating" and that for development costs alone "…18 percent say they spend from $500,000 to over $1,000,000 per app, with an average of $270,000 per app."[185] Furthermore, the Google presentation that Dr. Leonard relies upon specifies that up front development costs for games is $500,000.[186] In 2014, mobile games accounted for approximately 90% of Android's app revenue, however, Dr. Leonard caps his cost-per-app range at $100,000.[187]

168.   Dr. Leonard also incorrectly conflates the up front development cost for average mobile apps with that of the "most used apps". Highly used apps are likely to cost much more to develop and maintain than an average mobile app. The development of apps with millions of users requires the apps to be stable, robust, and tested for quality and failure under numerous test cases. I understand that in any coding process, time for debugging, testing, and ensuring quality usually takes much longer than simple code writing. There are numerous code processes and software quality initiatives that are required to ensure code works under a number of circumstances and test

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[181] Exhibit 5025 to the Deposition of Reto Meier, December 11, 2015, GOOGLE-37-00023782-785 at 783-784.

[182] GOOGLE-37-00023782-785 at 782.

[183] Deposition of Reto Meier, December 11, 2015, p. 72.

[184] http://www.formotus.com/14018/blog-mobility/figuring-the-costs-of-custom-mobile-business-app-development.

[185] http://www.formotus.com/14018/blog-mobility/figuring-the-costs-of-custom-mobile-business-app-development.

[186] Exhibit 5024 to the Deposition of Reto Meier, December 11, 2015, GOOGLE-03-00007402 at 462.

[187] http://www.androidauthority.com/app-annie-2015-app-retrospective-668731/

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9.   PREJUDGMENT INTEREST

312.   From an economic analysis standpoint, a time-value-of-money award would be necessary to compensate Oracle for the loss of use of funds during the damages period. However, I understand that an award of prejudgment interest is a legal matter and that the Court has substantial discretion in determining the interest rate and compounding method to be awarded. I have not prepared any prejudgment interest calculations as of this date, but am prepared to do so if requested by the Court.

10.   SIGNATURE

313.   I declare under penalty of perjury that the forgoing is a true and correct summary of my opinions in this matter,

_____   ___February 29, 2016___

James E. Malackowski   Date